

RECORDS AND DESCRIPTIONS OF MISCELLANEOUS CUBAN HEMIPTERA.

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The following new information on the Hemiptera of Cuba has accumulated in the past few years.

The types of species described here-in will be deposited in the U. S. National Museum and paratypes retained in the collections of the authors.

CYDNIDAE.

Cyrtomenus mirabilis (Perty)

One specimen from the town of Pinar del Río in western Cuba collected June 20, 1944, at light, by Dr. J. T. Roig constitutes the first record of the occurrence of this genus on the Island or in fact, so far as we know, at any locality in the West Indies.

PENTATOMIDAE.

Murgantia violascens (Westw.)

We have examined two examples of this species from Cuba, both taken in the eastern Province of Oriente: one collected near the coast south of Turquino Peak, elevation about 1000 feet, by J. Acuña, June 20, 1936, and the other from near the town of Holguín, R. G. Castañeda, collector. These measured only 7.2 mm. in length. Originally described from Jamaica, it has also been taken on two of the Florida Keys, but not heretofore recorded from Cuba. It is not represented in the Gundlach collection in Havana.

Acrosternum marginale Herrich-Schaeffer

- 1836. *Pentatoma marginale* Herrich-Schaeffer, Wanz. Ins. III: 95, Fig. 320.
 - 1837. *Pentatoma nitida* Westwood, Hope Cat. II: 33.
 - 1845. *Raphigaster marginalis* Herrich-Schaeffer, loc. cit. VIII: 6.
 - 1867. *Strachia olivacea* Walker, Cat. Het. II: 322. (teste Distant)
 - 1872. *Nezara marginalis* Stål, Enum. Hem. II: 40.
 - 1892. *Nezara marginalis* Berg, Nova Hem. Arg. Uruguay, 36.
- In 1932¹ we reported this species from Cuba as *Nezara nitida*

¹ Barber, H. G., and Bruner, S. C., 1932. The Cydnidae and Pentatomidae of Cuba. Jour. Dept. Agr. Puerto Rico, XVI: 262.

Westwood from a single faded specimen labeled *Nezara marginale* Herrich-Schaeffer contained in the Gundlach collection at Havana. As remarked it was impossible to make a close study of it but a brief description was given. As this species had not been recorded from the West Indies we had some doubt at the time as to its occurrence in Cuba. More recently this determination as Herrich-Schaeffer's species has been confirmed by the taking of several specimens on the island feeding on an exotic species of *Ixora*, as follows: Central Soledad, Cienfuegos, Las Villas Province, July 20, 1939 and Moa, Oriente Province, Nov. 15, 1945 (J. Acuña Coll.).

We find that the name *Nezara marginale* H.S. was published previously by P. Valdés² with the observation "15 mm., color verdoso." Although we have approved of this determination we would feel on safer grounds if it were possible to secure material from South America for comparison.

Apparently Kirkaldy³ was in error in rejecting Herrich-Schaeffer's name in favor of Westwood's.

Podisus jole Stål

There are three examples of this Mexican species, a male and two females, from Las Martinas, Pinar del Río Province, taken June 24, 1940, by J. Acuña. They measure 10.0-10.5 mm. in length and are rather pinkish testaceous in color including the antennae, although these are somewhat embrowned distally. The humeral angle of pronotum is subacute and black, the pale anterior lateral margin entirely straight and even. The outer apical angle of corium is broadly pink and the membrane slightly infusate; in one specimen there is a short, indefinite, dark vitta at the apex. The insect is coarsely punctate above, the pronotum being more sparsely punctate anteriorly, the surface rather glossy; below sparsely and shallowly punctate. The connexivum is somewhat narrowly exposed, flavescent, and appears slightly serrate, particularly in the female, due to the projecting, sharp apical angles of the segments. Below largely testaceous, more or less pinkish; legs immaculate. Venter paler covered with five rows of somewhat darker, irregular maculae; ventral spine long, reaching middle of mesocoxae.

² Valdés R., Pedro. 1910. Clasificación Gundlach de los Hemípteros Cubanos. An. Acad. Cien. Med., Fis. y Nat. Habana, XLVI, pp. 425-446.

³ Kirkaldy, G. W. 1909. Cat. Hem. Cim.: 116.

With this form, six species of the genus are now known to occur in Cuba.

COREIDAE.

Phthia splendida Valdés

1910. Valdés R., Dr. Pedro. Clasificación Gundlach de los Hemípteros Cubanos. An. Acad. Cien. Med., Fis. y Nat. Habana, XLVI: 431.

Form rather broad, robust, in part somewhat lustrous. Head much less than half as wide as the pronotum posteriorly. Basal segment of antenna but little if any longer than head, steel-blue. Rostrum extended to middle of the second visible ventral segment of abdomen. Pronotum distinctly pilose, very finely and closely punctate; behind the anterior depressed collar with a median pair of small, blunt papillary-like processes; humeral angle produced into an acute, dark spine directed slightly upward and forward; lateral margin with a widely spaced row of very distinct, irregular, obtuse teeth; two or three very small post-humeral teeth. Scutellum about as wide as long, transversely strigate. Clavus rather coarsely and closely punctate. Corium more closely and finely punctate. Connexivum narrowly exposed. Legs relatively short; posterior femur of male somewhat incrassate, armed below with three or four preapical, short, flattened, acute, recurved spines and above with several slight preapical tubercles.

Color steel-blue, somewhat lustrous. Head above with three narrow longitudinal orange-red fasciae, median one abbreviated and one on each side extended from the inner margin of the eye to base of head. Pronotum steel-blue anteriorly and posteriorly and along the lateral margin anteriorly, including the marginal teeth; disk with a broad, transverse, orange-red area extended to the humeral angle on each side, interrupted anteriorly by an abbreviated longitudinal streak; often with a few rounded spots anteriorly. Scutellum and corium steel-blue the latter with a broad, transverse, irregularly margined orange-red band just posterior to the middle. Connexival segments with alternating orange-red and black fasciae, the latter occupying somewhat less than half of the segment. Beneath with head, pleura and venter orange-red; each pleurite with a broad, steel-blue fascia extended obliquely forward from the coxae. Venter with a rather large rounded spot on each segment between the line of spiracles and middle line of venter; marginal

spots of the connexivum correspond with those of the dorsum. Legs steel-blue, lustrous. Length of male 16, female 18 mm.

Lectotype male: Moa, Oriente Province, Nov. 3-16, 1945. Eighteen paratypes and one nymph collected on *Taonabo parviflora* Kr. and Urb. by J. Acuña.

Fifth Instar Nymph.

Shining steel-blue above with the disk of the thorax in large part and most of the abdomen dull orange. It differs from the adult particularly in having two slender, erect, spine-like processes on the head in front of the eyes and a similar but longer, more approximate pair near the anterior margin of the pronotum. The first five connexival segments each has a short, erect, steel-blue, thumb-like projection on the margin and the disk of the abdomen is provided with a low, rounded, steel-blue tubercle and a small one behind this. All parts of the body including the structures referred to are provided with distinct and rather dense pilosity, while the adults are more sparsely pilose.

This very rare and apparently endemic species is represented by a single example in the Gundlach Museum in Havana said to have been taken at Guanabacoa near Havana. It is labeled *Phthia splendida* Uhler MS, a name supplied by Dr. Uhler in 1883 but never published by him. However it was published in 1910 by Dr. P. Valdés R. with the following very brief description: "12 mm. (length) *obscura fajas transversales pardas*. No. 431".

Cydamus borealis Distant

A single specimen of this species, described from Guatemala, was taken at Camagüey, Cuba, on August 10, 1927 by J. Acuña.

REDUVIIDAE.

Ctenotrachelus shermani Barber

1910. Barber, Entom. Amer. X (N.S.): 185.

A single specimen of what we have been unable to separate from *C. shermani* was collected by J. Acuña at Moa, Oriente Province, Nov. 3-16, 1945. It is a male 11 mm. long while the type female from North Carolina measured 14 mm. Except for the discrepancy in size it agrees in structure and color pattern with other specimens from the United States. This species must have a rather wide range as it has been taken at Hope, Ark., and Jackson, Miss. All specimens from the United States hitherto seen have been females.

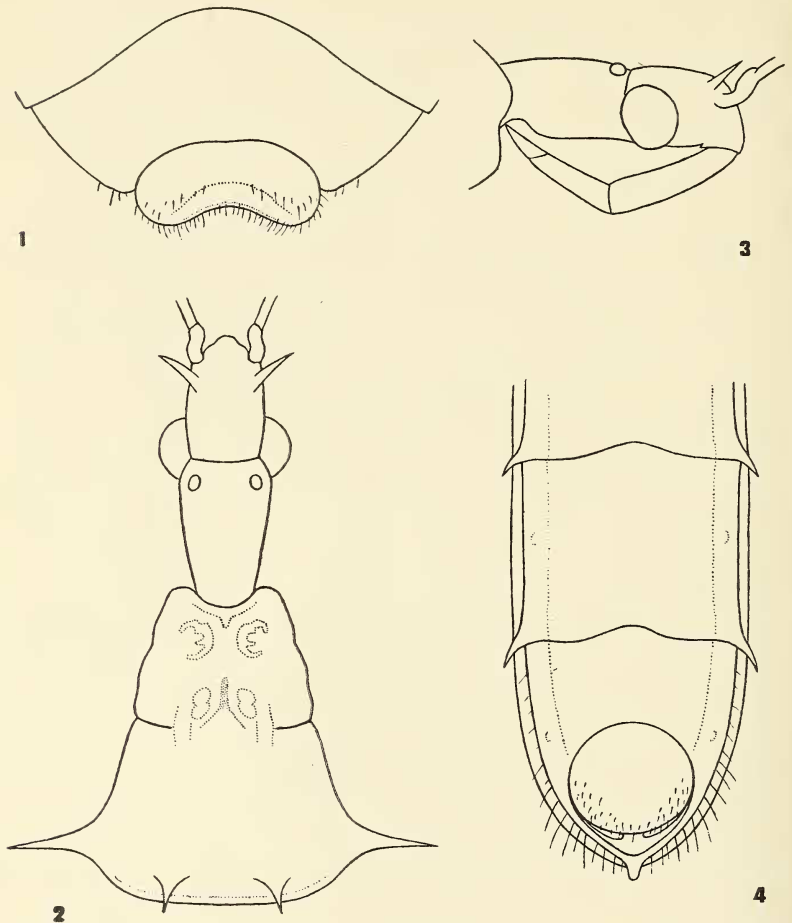


FIG. 1. Male hypopygium of *Acrosternum marginale* H.-S. FIG. 2. *Doldina cubana*, n. sp. Head and thorax. FIG. 3. Lateral view of head of same. The hairs have been omitted in this and the foregoing. FIG. 4. Apical half of venter of *Doldina cubana*, n. sp.

***Doldina cubana*, n. sp. (Figs. 2, 3 and 4)**

A moderately slender, dull reddish brown species, rather distinctly hirsute, the posterior lobe of the pronotum armed behind with four, strong, acute spines and the apical angle of the first five connexival segments with an acute spine.

Form rather slender (7×1) with long, thin legs and antennae. Head distinctly shorter than pronotum (26:31) and a little more than twice as long as wide across eyes, straight with sides sub-parallel in lateral view, suddenly coarctate at base, the constriction more pronounced below; anterior lobe slightly shorter than posterior lobe; eyes moderately prominent; ocelli large (nearly 0.2 mm. in diameter), well separated, almost as far apart as eyes, not distinctly elevated; post antennal spines nearly as long as vertical diameter of eyes; antenna normal, basal segment not quite as long as head and pronotum together, relative length of segments 37:10:28, apical segment missing; rostrum moderately curved, bent at joint between two basal segments; segment 1 slightly longer than 2 and 3 together. Pronotum distinctly longer than wide (31:24), flattened above, feebly declivent cephalad; anterior lobe unarmed, concave in front above, sculptured, anterior lateral angle prominent, rounded, disc behind with a short, median sulcus from transverse groove, the latter narrow and shallow; posterior lobe with surface minutely and shallowly punctate, the surface otherwise relative even, the four strong, acute spines behind smooth, a low, short, obtuse ridge running forward from before disc to anterior lobe either side of median depression and there obsolete, posterior margin truncate. Scutellum longer than wide (25:19), an elevated Y above, apex narrow but somewhat swollen. Legs slender, the anterior femur slightly stouter, apices of all femora with a small, acute spine on either side; the anterior tibia with a laterally flattened tooth above near apex. Abdomen narrow, not exceeding humeri in width, parallel-sided; connexivum not exposed, apical angles of first five visible segments with a very acute spine, directed obliquely backward and upward, largely visible from above; pygidium produced into a short, obtuse point; the claspers contained in genital capsule, the hind margin of latter broadly rounded. Length 15.5 mm., width 2.2 mm.

Dull reddish brown, nearly uniform, somewhat thinly covered with adpressed, whitish pubescence and long, pale, pilosity, more conspicuous on posterior lobe of head, legs, and apex of abdomen; eyes dark; ocelli crystalline; membrane brownish with concolorous veins; legs reddish.

Holotype: Male, from near Veguita, Oriente Province, Cuba, collected August 27, 1942, by J. Acuña.

This species is less elongate than the North American *Doldina*

interjungens Bergroth which in the male is at least eight times as long as broad. The thorax of the present form is also less cylindrical, being relatively narrower and more declivent cephalad. The spines are also much stronger than appears to be usual in this genus. It is, in fact, somewhat intermediate in several respects between *Doldina* and *Ricolla*, the latter common in the tropics of continental America. However, the structure of the head and more elongate form indicate that it should be referred to the former genus.

Doldina cubana seems rather similar to *D. bicarinata* Stål of Brazil, but has a spine on the posterior apical angles of only the first five connexival segments and the first joint of the antenna is relatively shorter. As in that species the posterior lobe of the pronotum is armed behind with four long spines. The color differs in being reddish brown rather than sordid flavescent, but this is no doubt variable. It appears also to be related to *D. antiquensis* Barber (1923); however, the latter has only the first three abdominal segments armed with spines, aside from other differences.

MIRIDAE: PHILINAE.

Campylomma cardini, n. sp. (Fig. 5)

Rather broadly oval with a short rostrum, entirely pale and nearly concolorous above, minutely and inconspicuously pubescent, appearing practically bare at ordinary magnifications.

MALE.—Head width 0.66 mm., vertex 0.30 mm., length 0.19 mm. Rostrum short, reaching to middle of anterior coxae, apex embrowned, joint 2 longest. Antennae as long as head, pronotum, scutellum, and nearly reaching tip of clavus; first segment, length 0.19 mm.; second 0.66 mm.; third 0.42 mm.; fourth 0.26 mm.; clothed with minute pubescence, the thickened basal segment with a few short hairs also.

Pronotum, length 0.47 mm., width at base 0.87 mm. Above with pronotum and hemelytra finely punctate, rather thinly and finely pubescent, many punctures with a minute hair, more noticeable on hemelytra; also a few longer hairs around edges. Legs minutely pubescent, the tibiae armed with rows of spines. Genital segment somewhat asymmetrical, a stout chitinous spine projecting from above near the apex, directed obliquely to the left.

Pale greenish testaceous above with blackish eyes, fading in dried specimens to light testaceous. Antennae, head, mesoscutum, and scutellum more yellowish. Hemelytra translucent; cuneus and corium concolorous; membrane slightly

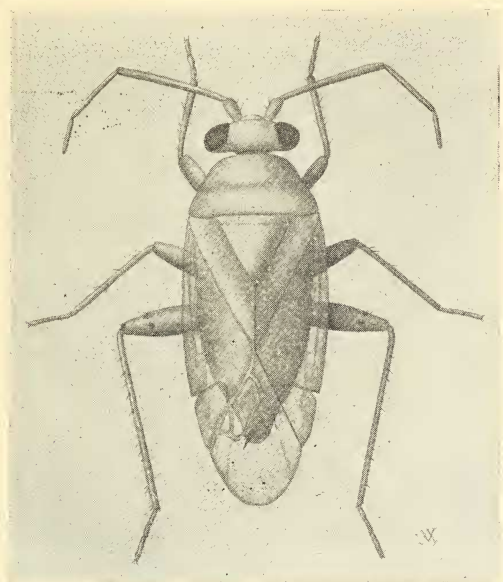


FIG. 5. *Campylomma cardini*, n. sp.

infusate, nearly hyaline. Body below similar but abdomen yellowish green; legs pale flavescens, the posterior femur with about five rather large, rounded, black spots on apical half, unequal in size; intermediate femur usually with one or two similar spots; spines on tibia dark, hind tibia with a row of minute black dots.

Length 2.50 mm. (2.25–2.54 mm.), width 0.90 mm. (hemelytra).

FEMALE.—Similar in coloration and general appearance to male except that the antennae are relatively shorter and abdomen is broader and usually more distinctly green. Head width 0.65 mm., vertex 0.36. Antennae, first segment, length 0.19 mm.; second 0.50 mm.; third 0.35 mm.; fourth 0.26 mm. Pronotum, width at base 0.85 mm.

Length 2.44 mm. (2.35–2.63 mm.), width 0.94 mm. (hemelytra).

HOST PLANT.—The exotic “Oreja de judío” or Guanacaste Earpod Tree, *Enterolobium cyclocarpum* (Jacq.) Gris. of the family *Mimosaceae*, native to other countries of tropical America.

Holotype: Male, Santiago de las Vegas, Havana, Cuba, July 4,

1945, S. C. Bruner. *Allotype*: Female, same data. *Paratypes*: 1 male, Calabazar, Aug. 5, 1928, S. C. Bruner; 1 male, Arroyo Naranjo, Sept. 14, 1936, L. C. Scaramuzza; 5 males and 1 female, Santiago de las Vegas, July 19, 1944, S. C. Bruner; 19 males and 12 females, July 4, 1945, same locality and collector.

This insect is at present known to occur only in Havana and Matanzas Provinces, Cuba, where it is a pest of the shade tree mentioned, seen along some of the older highways. Indications of infestations are noted as early as June, the foliage on certain trees gradually turning pale yellow due to a constantly increasing number of yellow dots on the upper surface. The leaflets later fall, so that by early autumn all of the trees of this species in a district may be largely or entirely defoliated.

The species is distinguished from the introduced European *C. verbasci* (Meyer), the only other member of the genus known to occur in America, by the absence of dark markings on the tylus and two basal segments of the antennae, the concolorous hemelytra, and the pale color of the body below, without appreciable pubescence.

It was first studied in Cuba by the late P. Cardín (*Psallus* sp., Third Annual Report, Est. Exp. Agr., Cuba, p. 152, 1915). In 1936 Dr. H. H. Knight determined specimens for the junior author as *Campylomma*, n. sp., but has been unable to give it further attention. The genus is common in the Old World and Oshanin (1912) lists ten species known in Europe, Asia, and Africa; recently it has been found to be widespread in Oceania. An even larger number has been discovered there by Knight and Usinger, these occurring in the Marquesas, Samoa, Tahiti, the Philippines, Guam, and Hawaii. It is not entirely unlikely that the present form will eventually prove to be introduced.

GELASTOCORIDAE.

Gelastocoris oculatus (F.)

We have five specimens of this widespread form from Pinar del Río Province, four collected by J. P. Carabia, Jan. 11, 1937, at Puerto de Golpe and one taken at Las Martinas, June 24, 1940, by J. Acuña, both localities in extreme western Cuba. The genus is rare or very local in this country; it is not represented in the collection of Gundlach in Havana nor is it listed among the insects obtained by him from the Island (MS). However, Uhler⁴ under

⁴ Uhler, P. R. 1876. List of the Hemiptera . . . etc. Bull. U. S. Geol. Geog. Surv., Vol. 1, Ser. 2, No. 5, page 336.

Galgulus variegatus Guer. says: "Inhabits . . . Cuba," in addition to various localities in continental North America. This record has been repeated by Champion in the "Biologia," page 349, and by others, but there appear to be no recent reports of its occurrence anywhere in the West Indies. It seems probable that Uhler's Cuban record really referred to *G. oculatus* as there has been considerable confusion in the past regarding the species in this genus.

Chermidae Notes.—The following records of Chermidae are for material recently identified by Miss Louise M. Russell of the U. S. Bureau of Entomology and Plant Quarantine:

Chermidae, Chermiinae:

Chermes cooleyi Gillette, from Canadian spruce, Logan, Utah, May 2 and 5, 1928; white spruce, Logan, July 22, 1929, at which time they were abundant; on *Picea engelmanni* at Big Cottonwood Canyon, Utah, June 29, 1925, and Logan Canyon, June 23 and August 28, 1925; on Colorado blue spruce, Cedar Canyon, Utah, July 8, 1925. Specimens, apparently *C. cooleyi*, were taken on Douglas fir at Logan Canyon, Utah, June 23, 1925, and at Kaibab Forest, Arizona, July 12, 1925; on white balsam, Spring Hollow, Logan Canyon, Utah, August 28, 1925; pine, Emigration Canyon, Utah, June 21, 1925; Cedar Canyon, Utah, July 8, 1925 (Knowlton).

Pineus coloradensis (Gillette) on western yellow pine, Kaibab Forest, Arizona, July 12, 1925 (Knowlton).

P. pinifoliae (Fitch) on *Picea engelmanni*, Gallatin County, Montana, June 28, 1940 (Knowlton).

P. similis (Gillette) on *Pinus flexilis*, Pingree Park, Colorado, August 21, 1935; on conifer, Mink Creek Canyon, Idaho, June 24, 1925; on Colorado blue spruce, Kaibab Forest, Arizona, July 12, 1925; and at Cedar Canyon, Utah, July 8, 1925 (Knowlton).

Chermidae, Phylloxerinae:

Phylloxera sp. on wild grape, Zion National Park, Utah, July 10, 1925 (Knowlton).—GEORGE F. KNOWLTON, Utah State Agricultural College, Logan.